



Vimentin Methylation as a Gastrointestinal Cancer Biomarker

Moinova *et al.* _____ Page 594

Although methylation of the Vimentin gene (VIM methylation) is a biomarker for colon neoplasia, the use of VIM methylation to detect gastrointestinal cancer has not been explored. Moinova and colleagues tested VIM methylation in archival specimens of esophageal and gastric neoplasia and report that aberrant VIM methylation is common in esophageal and gastric neoplasms. Specifically, VIM methylation was detected in all Barrett esophagus and high-grade dysplasia cases and in the majority of esophageal adenocarcinoma cases. These findings establish aberrant VIM methylation as a common epigenetic alteration in neoplasia of the upper gastrointestinal tract.

Prostate Cancer and Coronary Artery Disease

Thomas *et al.* _____ Page 576

Coronary artery disease and prostate cancer share many risk factors. To explore the relationship between coronary artery disease and prostate cancer risk, Thomas and colleagues evaluated participants in the REDUCE study, which tested the effectiveness of dutasteride for prostate cancer risk reduction. The authors report that coronary artery disease was associated with a 35% increased risk of prostate cancer diagnosis. In addition, men with coronary artery disease had higher prostate-specific antigen levels and larger prostate volumes. These findings suggest that coronary artery disease may be a novel factor for prostate cancer risk and encourage future studies to determine if lifestyle changes that reduce coronary artery disease risk can also reduce the risk of prostate cancer.

Vitamin D and Colorectal Cancer Mortality

Fedirko *et al.* _____ Page 582

Increased levels of 25-hydroxy-vitamin D [25(OH)D] are associated with lower risk of developing colorectal cancer, but the influence of blood 25(OH)D on mortality after colorectal cancer diagnosis is not known. To address this question, Fedirko and colleagues examined patients in the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort who were diagnosed with colorectal cancer between 1992 and 2003. The authors report that higher 25(OH)D levels were associated with reductions in both colorectal cancer-specific and overall mortality. These findings should stimulate further investigations of the effects of vitamin D on colorectal cancer outcomes.

Alcohol and DNA Adduct Formation

Balbo *et al.* _____ Page 601

Alcohol consumption is an established cause of head and neck cancer. Acetaldehyde, a metabolite of ethanol, reacts with DNA to produce adducts, which can serve as biomarkers of alcohol exposure. Balbo and colleagues measured levels of *N*²-ethylidene-dGuo (the major adduct of acetaldehyde) in the DNA of oral cells following alcohol consumption. The authors report that *N*²-ethylidene-dGuo levels increased as much as 100-fold after alcohol consumption in a dose-responsive manner. These results strongly support the key role of acetaldehyde in head and neck cancer caused by alcohol drinking and represent conclusive evidence linking alcohol and DNA adduct formation in humans.